



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/564,410

01/13/2006

Sebastien Bardon

0543-1013

3459

466 7590 07/11/2008

YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER

GREENE, JASON M

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

07/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,410	Applicant(s) BARDON, SEBASTIEN	
	Examiner Jason M. Greene	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 10, 11, 15 and 17 is/are rejected.
- 7) ☒ Claim(s) 12-14, 16 and 18-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/13/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 10 recites the broad recitation "A filter body", and the claim also recites "in particular for filtering particles contained in the exhaust gases of an internal combustion engine" which is the narrower statement of the range/limitation. For examination purposes, the limitation following the phrase "in particular" has been interpreted as not being a required feature of the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tepper et al. (US 5,290,330).

Tepper et al. discloses a filter body (10) formed by bonding filter units (20) by means of a joint, characterized in that an exterior surface (28 or 32) of a first of the units face to face (end face to end face) with a second of the units and in contact with the joint includes at least one irregularity (rib 33 or 34) of the boss and/or recess type, wherein the exterior surface includes a plurality of the irregularities regularly spaced from each other, and wherein the irregularity is conformed so that it can be accommodated in an irregularity (33 or 34) of a complementary shape of the second unit in Figs. 1-3 and col. 3, lines 4-51.

6. Claims 10 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by German Patent Application Publication DE 299 12 194 U1.

DE 299 12 194 U1 discloses a filter body formed by bonding filter units by means of a joint, characterized in that an exterior surface of a first of the units face to face with a second of the units and in contact with the joint includes at least one irregularity (11 or 12) of the boss and/or recess type, wherein the irregularity is conformed so that it can be accommodated in an irregularity (11 or 12) of a complementary shape of the second unit in Figs. 1-3 and the English language abstract.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 10, 11, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse et al. (US 4,914,187) in view of German Patent Application Publication DE 299 12 194 U1 or Gesing et al. (US 4,443,313).

Naruse et al. discloses a filter body (1) for filtering particles contained in the exhaust gases of an internal combustion engine, the filter body being formed by bonding filter units (2) by means of a joint (4) in Figs. 1 and 2 and col. 7, lines 14-46.

Naruse et al. does not disclose an exterior surface of a first of the units face to face with a second of the units and in contact with the joint including at least one irregularity of the boss and/or recess type.

DE 299 12 194 U1 teaches a similar honeycomb filter wherein an exterior surface of a first of the units face to face with a second of the units and in contact with the joint including at least one irregularity (11 or 12) of the boss and/or recess type, wherein the irregularity extends along the longitudinal axis of the first filter unit over the whole length of the first filter unit, and wherein the irregularity is conformed so that it can be

accommodated in an irregularity (11 or 12) of complementary shape of the second unit in Figs. 1-3 and the English language abstract.

Gesing et al. discloses a similar honeycomb structure (8) wherein an exterior surface of a first of the units (7) face to face with a second of the units and in contact with the joint including at least one irregularity of the boss and/or recess type, wherein the irregularity extends along the longitudinal axis of the first filter unit over the whole length of the first filter unit, and wherein the irregularity is conformed so that it can be accommodated in an irregularity of complementary shape of the second unit in Fig. 5 and col. 6, lines 49-55.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the boss and/or recess type irregularities of DE 299 12 194 U1 or Gesing et al. into the filter body of Naruse et al. to allow the filter units to be connected without using an adhesive, as suggested by DE 299 12 194 U1 in the English language abstract, and to restrain the units against mutual displacement to prevent the fluid to be treated from short circuiting the filter body, as suggested by Gesing et al. in col. 6, lines 49-55.

With regard to claim 15, it would have been obvious to one of ordinary skill in the art at the time the invention was made to duplicate the boss and/or recess type irregularities in that duplicating parts for a multiplied effect is merely a choice of design. See *St. Regis Paper Co. v. Bemis Co, Inc.*, 193 USPQ 8, 11.

Allowable Subject Matter

9. Claims 12-14, 16 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claims 12-14 and 19-21, the prior art made of record does not teach or fairly suggest the filter body of claims 10 or 11 wherein the irregularity is a recess or a boss carried by an exterior face of a gas outlet passage at the periphery of the first unit.

With regard to claim 16, the prior art made of record does not teach or fairly suggest the filter body of claim 10 wherein at least one portion of the exterior surface of the first unit has a sinusoidal shape in cross section.

With regard to claim 18, the prior art made of record does not teach or fairly suggest the filter body of claim 10 wherein the irregularity is a recess formed in the thickness direction of an exterior wall of a passage at the periphery of the first unit.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Haerle, Hamanaka et al., Bardon et al., Sakamoto, Manfré et al. and Cunningham et al. references disclose similar filter bodies.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571) 272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/564,410

Page 9

Art Unit: 1797

Jason M. Greene
Primary Examiner
Art Unit 1797

/Jason M. Greene/
7/6/08

jmg
July 6, 2008